



INDIANA UNIVERSITY

SCHOOL OF PUBLIC AND  
ENVIRONMENTAL AFFAIRS

Center for Health Policy  
IUPUI

# State Epidemiological Profile, 2007

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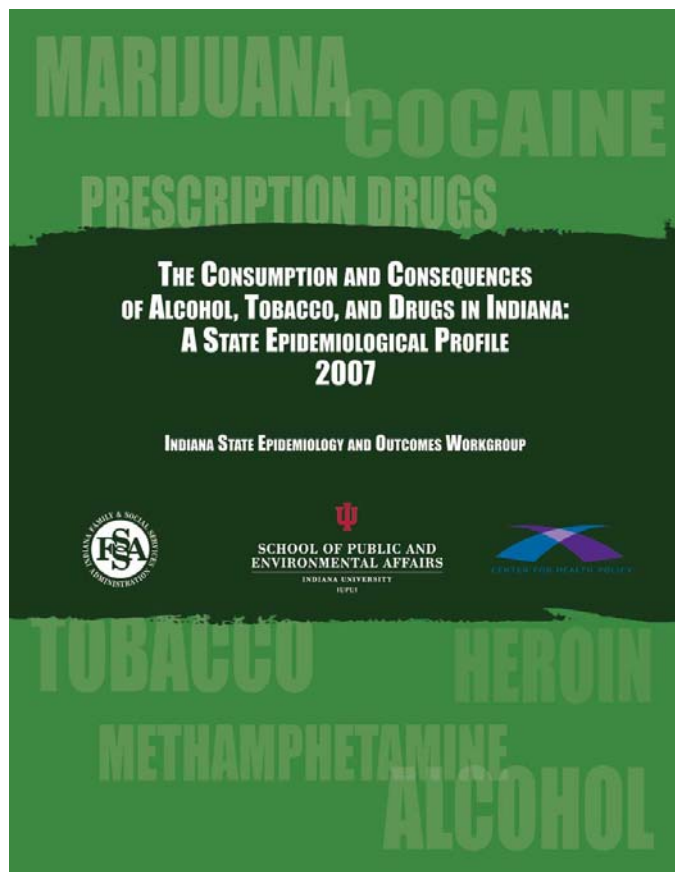


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<http://www.healthpolicy.iupui.edu/SEOW.htm>



# What's New?

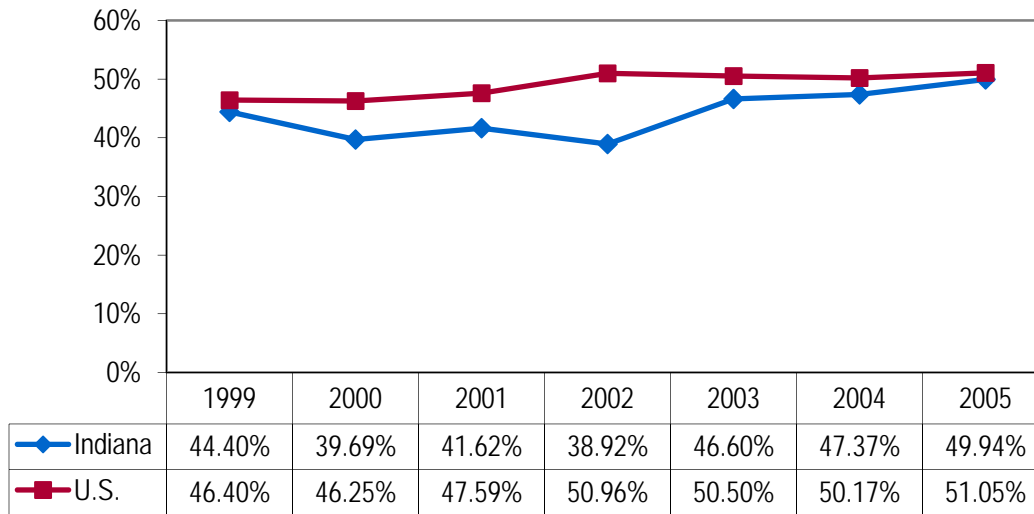
- Data Highlights
  - Summary of individual drug chapters
  
- Identification of Communities with Significant Substance Abuse Challenges
  - Ranking of counties
  - Highest need/highest contributor model
  - Top (most severe) 25%
  - Expansion of proxy indicators



# Alcohol

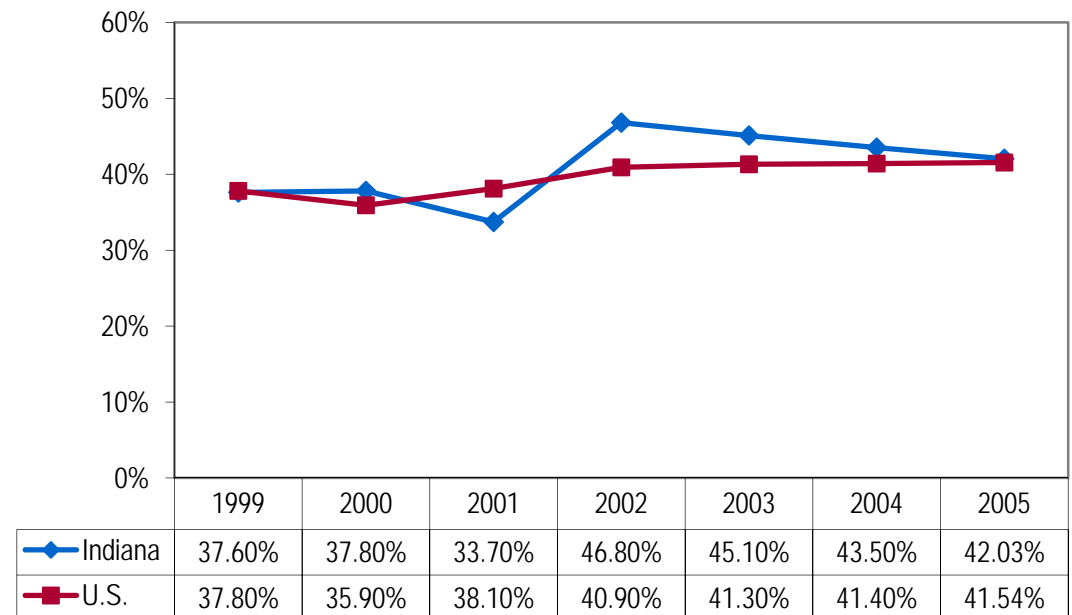
- Most frequently used drug
- Among Hoosiers 12+ years<sup>1</sup>
  - 50% (2.5 million residents) currently drink alcohol
  - 22% (1.1 million residents) engage in binge drinking
- Highest risk: 18- to 25-year olds
  - 61% current consumption<sup>1</sup>
  - 42% binge drinking<sup>1</sup>
  - Heavy drinking (18 to 24 years): IN: 12%; U.S.: 7% <sup>2</sup>

# Current and Binge Alcohol Use



**Current Alcohol Use in  
Individuals 12+ years (NSDUH)<sup>1</sup>**

## **Binge Drinking in 18- to 25- Year Olds (NSDUH)<sup>1</sup>**





# Alcohol – Youth

## Youth Consumption – Underage Drinking

- 29% of Hoosiers ages 12-20 reported current use of alcohol and 19% engaged in binge drinking<sup>1</sup>
- 17% of Indiana youth ages 12-17 years reported current use of alcohol and 11% engaged in binge drinking<sup>1</sup>
- 41% of Indiana high school students reported current use of alcohol and 25% have engaged in binge drinking<sup>3</sup>



# Alcohol – Consequences

- Abuse/dependence
  - Rate among Hoosiers 12+ years is 8% <sup>1</sup>
  - Highest rate among 18-25 year-olds (18%) <sup>1</sup>
  - 8% of Hoosiers 12+ years need but don't receive treatment <sup>1</sup>
  - Admission to treatment for alcohol (IN: 47%; U.S.: 39%)<sup>5</sup>
- About 11,700 alcohol-related collisions – almost 300 fatal <sup>9</sup>
- Roughly 37,000 arrests for DUI, 21,000 for public intoxication, and 17,000 for liquor law violations <sup>10</sup>



# Tobacco

- Current tobacco consumption (12+ years)<sup>1</sup>
  - IN: 33% (1.7 million residents); U.S.: 29%
  - Highest rate among 18- to 25-year olds (48%)
- Current cigarette consumption (12+ years)<sup>1</sup>
  - IN: 28% (1.4 million residents); U.S.: 25%
  - Highest rate among 18- to 25-year olds (42%)
- Indiana's adult (18+ years) smoking prevalence 5<sup>th</sup> highest in the nation<sup>2</sup>
  - IN: 24%; U.S.: 20%
  - 19% of Hoosiers smoke cigarettes every day
- Highest-risk groups: young adults, low-income and low educational attainment





# Tobacco – Youth

- 14% of 12-17 year-olds in Indiana, currently use a tobacco product and 12% smoke cigarettes<sup>1</sup>
- 8% of middle school and 21% of high school students in Indiana currently smoke cigarettes; White high school students have significantly higher rates than their Black counterparts (22% and 13%)<sup>11</sup>
- Use of cigarettes (lifetime, annual, monthly, and daily use) among Indiana students in grades 6 through 12 has remained stable or declined significantly from the previous year; cigar and pipe use showed a significant incline in some grades<sup>4</sup>

# Current Cigarette Use

40%  
30%  
20%  
10%  
0%

—◆ Middle School  
—■ High School

	2000	2002	2004	2006
◆ Middle School	9.9%	8.6%	7.8%	7.7%
■ High School	31.6%	23.4%	21.3%	23.2%

**Current Cigarette Use in Indiana Middle and High Schools (IYTS)<sup>11</sup>**

**Current Cigarette Use in Individuals 12+ years (NSDUH, 2005)<sup>1</sup>**

60%  
50%  
40%  
30%  
20%  
10%  
0%  
-10%

■ Indiana  
■ U. S.

	Total	12-17	18-25	26 and older
■ Indiana	27.96%	12.28%	42.18%	27.59%
■ U. S.	24.90%	11.33%	39.27%	24.23%



# Tobacco – Consequences

- Tobacco kills approximately 10,000 Hoosiers annually<sup>12</sup>
- On average, smoking reduces adult life expectancy by about 14 years<sup>13</sup>
- Tobacco causes serious health consequences, including heart disease, various cancers, and respiratory illnesses: in 2004, a total of 3,827 Hoosiers died from lung cancer, 13,680 died from coronary disease, and 3,145 died from respiratory illnesses<sup>14</sup>
- The average annual age-adjusted smoking-attributable mortality rate in Indiana is 322.2 per 100,000 population<sup>15</sup>
- Environmental tobacco smoke (or second-hand smoke) is also detrimental to health outcomes, and can cause many illnesses, especially in children<sup>12</sup>



# Marijuana

- Marijuana is the most commonly used illicit substance in Indiana and the nation
- Among Hoosiers 12+ years <sup>1</sup>
  - 5% (263,000 residents) used marijuana in the past month
  - 10% (492,000 residents) used it in the past year
  - 40% (about 2 million residents) used it at least once in their life
- Highest rate of current use is among 18- to 25-year olds (14%)<sup>1</sup>



# Marijuana – Youth

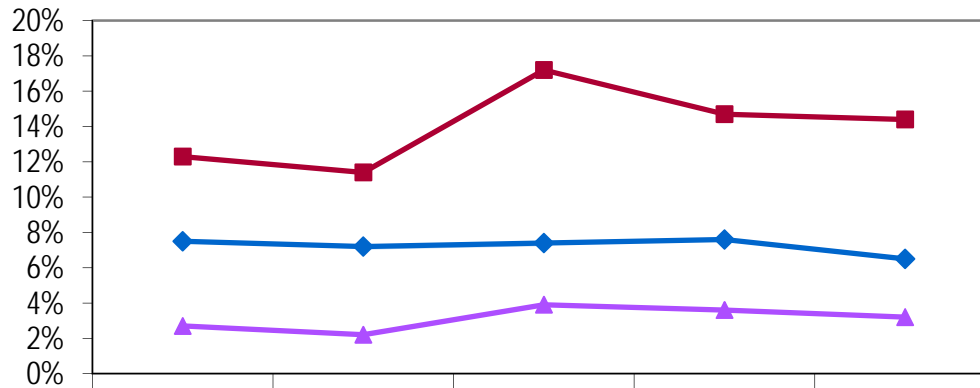
- 6% of Indiana youth ages 12 to 17 have used marijuana for the first time during the past year and 7% currently use marijuana<sup>1</sup>
- Among high school students, 19% report current marijuana use<sup>3</sup>
- 8% of 8<sup>th</sup> grade students, 14% of 10<sup>th</sup> grade students, and 16% of 12<sup>th</sup> grade students in Indiana currently use marijuana<sup>4</sup>



# Marijuana – Consequences

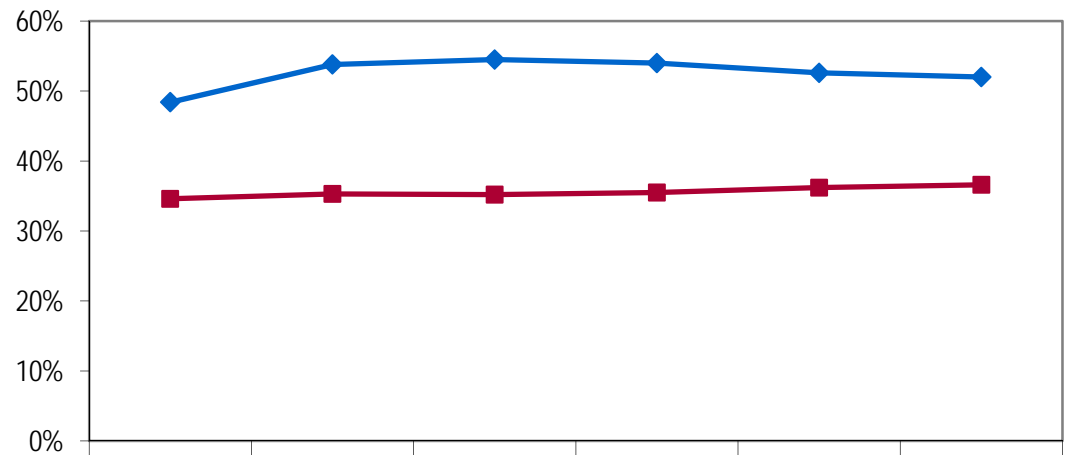
- Abuse/dependence<sup>5</sup>
  - Compared to the nation, significantly more Hoosiers reported marijuana use (52%) or dependence (24%) at treatment admission (U.S.: 37% and 16%)
  - Highest-risk groups: males; under 18 years
- Roughly 15,400 arrests were made for marijuana possession and 2,100 for sale/manufacture<sup>10</sup>

# Marijuana Use



◆ 12 -17	7.5%	7.2%	7.4%	7.6%	6.5%
■ 18-25	12.3%	11.4%	17.2%	14.7%	14.4%
▲ 26 and older	2.7%	2.2%	3.9%	3.6%	3.2%

## Marijuana Use Reported at Treatment Admission (TEDS) <sup>5</sup>



◆ Indiana	48.4%	53.8%	54.5%	54.0%	52.6%	52.0%
■ U.S.	34.6%	35.3%	35.2%	35.5%	36.2%	36.6%



# Cocaine

- Among Hoosiers 12+ years<sup>1</sup>
  - 0.7% (33,000 residents) currently use cocaine
  - 2.3% (120,000 residents) used cocaine in the past year
  - 11.1% (562,000 residents) used cocaine at least once in their life
- Highest rate of past-year use was found among 18- to 25-year olds (7.5%)<sup>1</sup>





# Cocaine – Youth

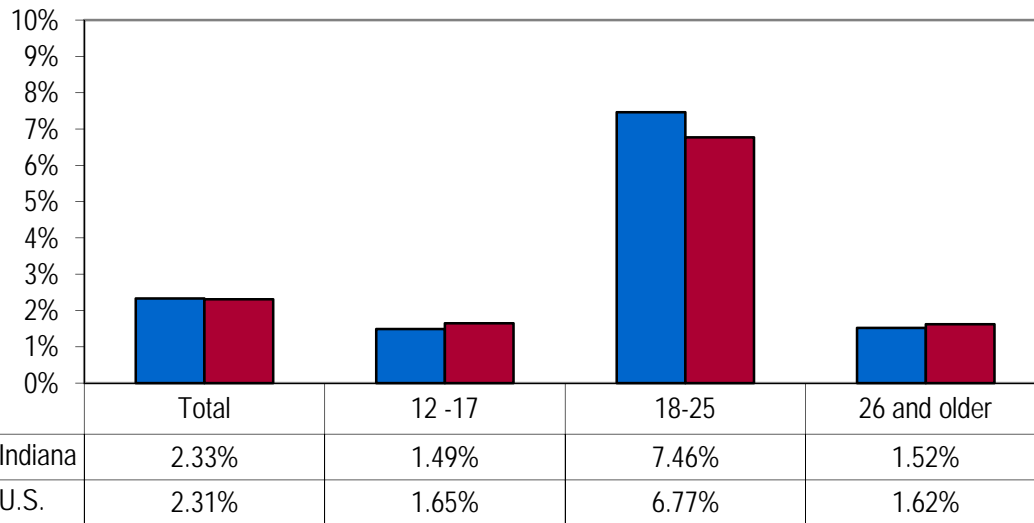
- 1.5% of Indiana youth ages 12 to 17 have used cocaine in the past year<sup>1</sup>
- Among Indiana high school students, 7% have used a form of cocaine at least once in their life and 3% are current users<sup>3</sup>
- 2.4% of 12<sup>th</sup> grade students in Indiana report current cocaine use and 1.1% report current crack use<sup>4</sup>



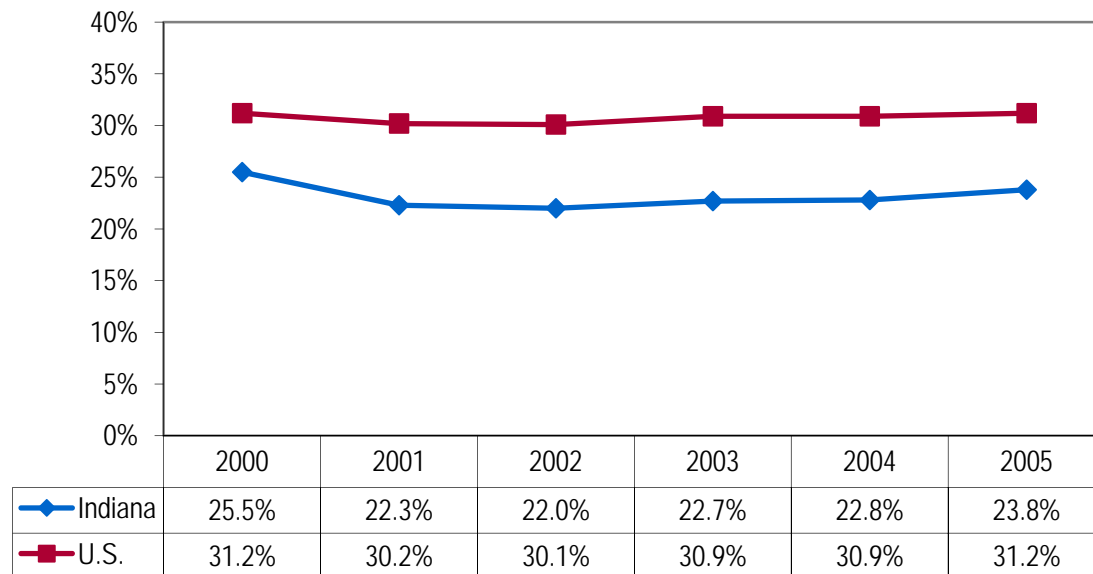
# Cocaine – Consequences

- Abuse/dependence<sup>5</sup>
  - Cocaine use and dependence reported at treatment admission is significantly lower for Indiana (24% and 12%) than the U.S. (31% and 14%)
  - Admissions for cocaine use/dependence decreased significantly in Indiana's treatment population from 2000 through 2005
- About 5,000 arrests for cocaine/opiates possession and 2,600 for sale/manufacture<sup>10</sup>

# Cocaine Use



## Cocaine Use Reported at Treatment Admission (TEDS)<sup>5</sup>





# Heroin

- Among Hoosiers 12+ years<sup>1</sup>
  - 0.0% (1,000 residents) currently use heroin
  - 0.2% (9,000 residents) used heroin in the past year
  - 1.1% (54,000 residents) tried heroin at least once in their life



# Heroin – Youth

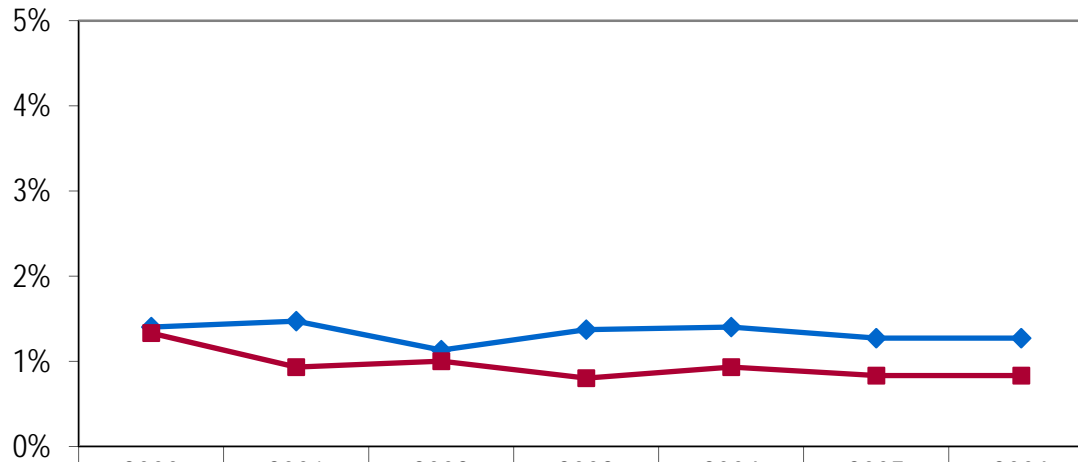
- 2.4% of Indiana high school students have used heroin at least once in their life<sup>3</sup>
- Among Indiana 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> grade students combined<sup>4</sup>
  - 1.9% have tried heroin at least once in their life
  - 1.3% used it in the past year
  - 0.8% used it in the past month



# Heroin – Consequences

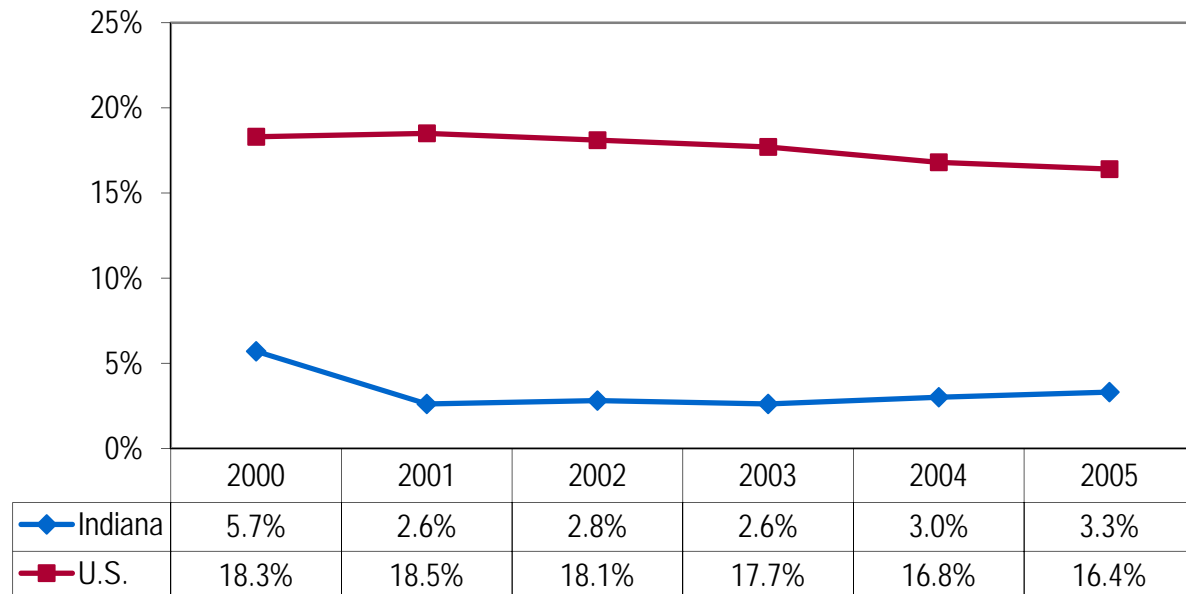
- Abuse/dependence<sup>5</sup>
  - Heroin use and dependence reported at treatment admission is significantly lower in Indiana (3% and 2%) than the U.S. (16% and 14%)
  - Admissions for heroin use/dependence decreased significantly in Indiana's treatment population from 2000 through 2005
- About 5,000 arrests for cocaine/opiates possession and 2,600 for sale/manufacture<sup>10</sup>

# Heroin Use



**Annual Heroin Use in 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> Grade Students Combined (ATOD; MTF) <sup>4</sup>**

**Heroin Use Reported at Treatment Admission (TEDS) <sup>5</sup>**





# Methamphetamine (Meth)

- Among Hoosiers 12+ years<sup>1</sup>
  - 0.2% (10,000 residents) currently use meth
  - 0.8% (40,000 residents) used meth in the past year
  - 4.5% (225,000 residents) used meth at least once in their life
- Highest rate of use is found in 18- to 25-year olds (1.9%)<sup>1</sup>





# Methamphetamine – Youth

- 7% of Indiana high school students have tried meth at least once in their life<sup>3</sup>
- 0.7% of 8<sup>th</sup> grade students, 1.0% of 10<sup>th</sup> grade students, and 1.0% of 12<sup>th</sup> grade students in Indiana report current meth use<sup>4</sup>
- In Indiana, meth use (lifetime, annual, and current) in middle and high school students has decreased significantly in most grades or remained stable from 2006 to 2007<sup>4</sup>



# Methamphetamine – Consequences

- Abuse/dependence<sup>5</sup>
  - Meth use and dependence reported at treatment admission is significantly lower in Indiana (11% and 6%) than the U.S. (12% and 8%)
  - Admissions for meth use/dependence increased significantly in Indiana's treatment population from 2000 through 2005

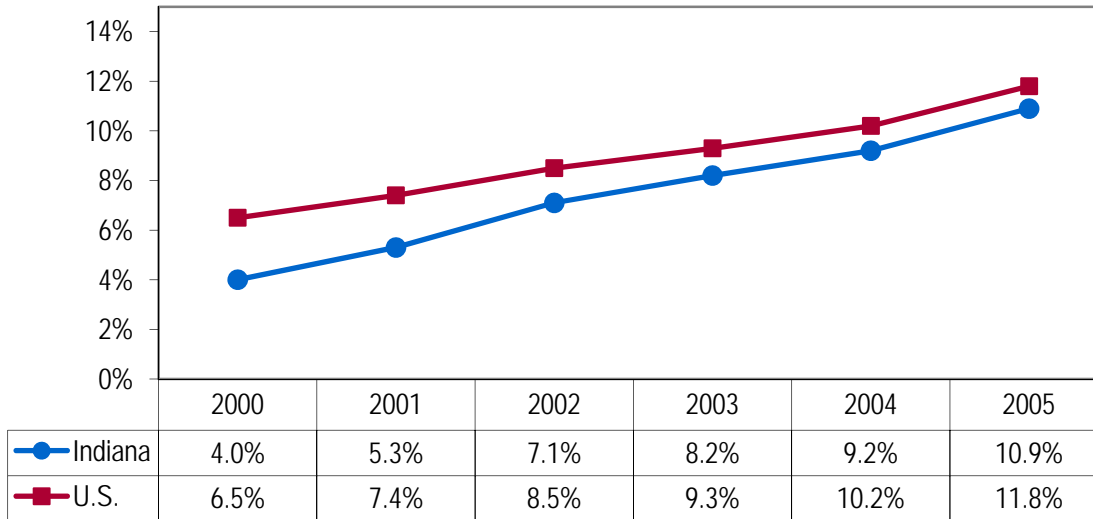


# Methamphetamine – Consequences

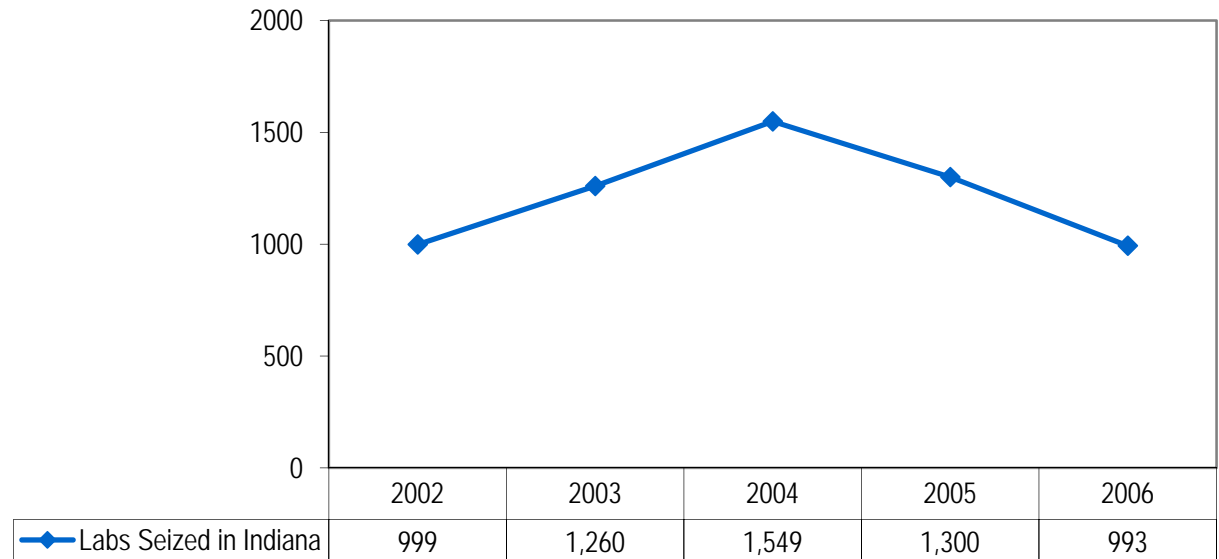
- 993 clandestine meth labs were seized in 2006 (a decrease from 1,549 in 2004) <sup>21</sup>
- Number of children affected by meth labs fell from 217 in 2004 to 144 in 2006<sup>21</sup>
- About 2,000 arrests were made for possession of meth and other synthetic drugs and almost 600 for sale/manufacture<sup>10</sup>

# Methamphetamine Use

**Meth Use Reported at Treatment Admission (TEDS) <sup>5</sup>**



**Number of Clandestine Meth Labs Seized in Indiana (DEA/EPIC) <sup>21</sup>**





# Prescription Drug Abuse

- Among Hoosiers 12+ years<sup>1</sup>
  - 2.7% (138,000 residents) currently abuse psychotherapeutics
  - 5.4% (278,000 residents) abused them in the past year
  - 21% (about 1 million residents) abused them at least once in their life
- Highest rate of past-year use: 18-25 year-olds (14%)<sup>1</sup>
- Oxycodone distribution to retail registrants nearly doubled in Indiana from about 29 million dosage units in 2002 to a projected 54 million in 2007<sup>23</sup>



# Prescription Drugs – Youth

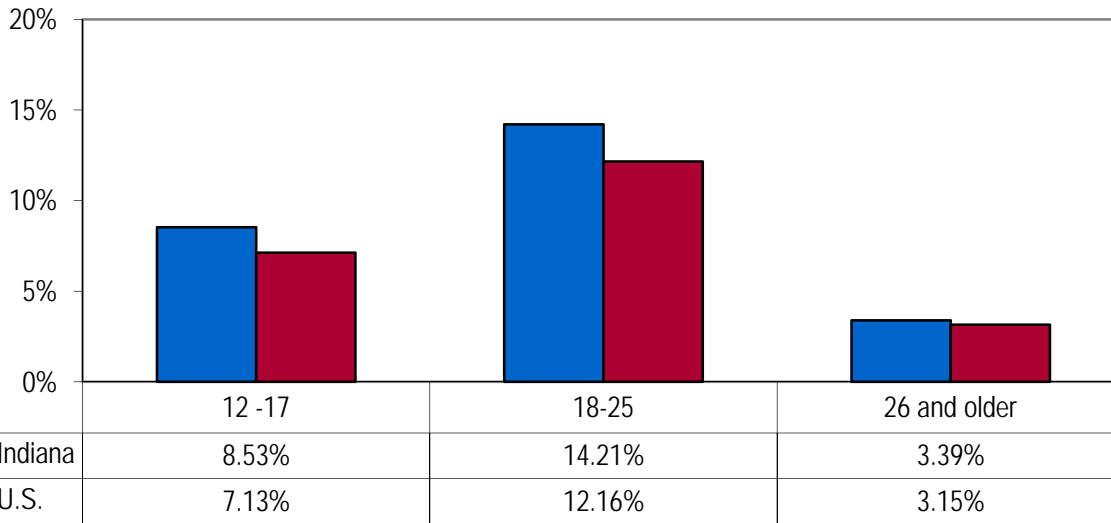
- Roughly 9% of young people ages 12 to 17 abused prescription drugs in the past year<sup>1</sup>
- Significant increase in Ritalin use among Indiana high school seniors from 2006 to 2007 (lifetime use: from 7% to 11%; annual use: from 4% to 7%; current use: from 2% to 3%)<sup>4</sup>
- Tranquilizers use among 12<sup>th</sup> grade students in Indiana decreased and the use of narcotics remained stable<sup>4</sup>



# Prescription Drugs – Consequences

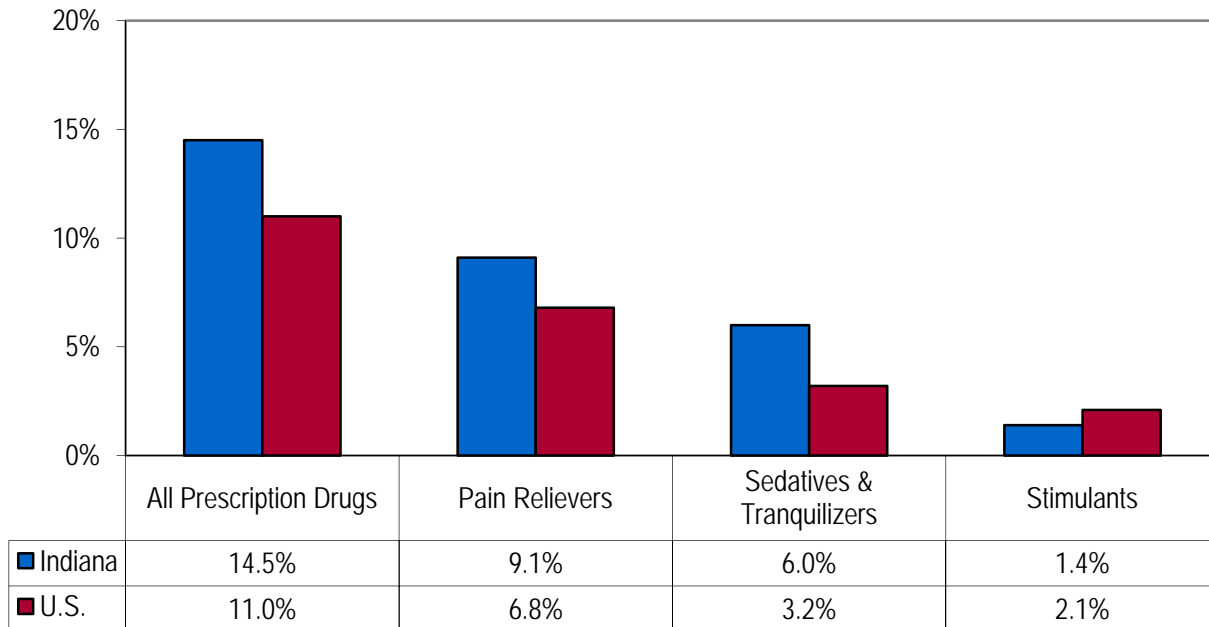
- Abuse/dependence<sup>5</sup>
  - Prescription drug abuse and dependence reported at treatment admission is significantly higher in Indiana (15% and 7%) than the U.S. (11% and 5%)
  - Admission for pain reliever and sedative/tranquilizer use/ dependence increased significantly from 2000 to 2005, while admissions for stimulant use/dependence remained stable
- About 2,600 arrests were made for possession of barbiturates and Benzedrine and roughly 750 for sale/manufacture (significantly lower than the nation)<sup>10</sup>

# Prescription Drug Abuse



**Past-year Pain Reliever Use (NSDUH, 2005)<sup>1</sup>**

**Prescription Drug Abuse Reported at Treatment Admission (TEDS, 2005)<sup>5</sup>**



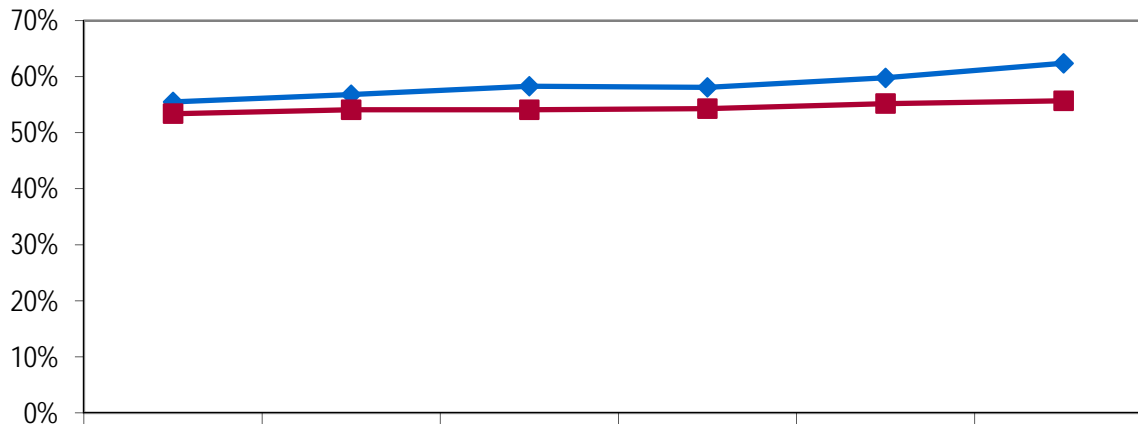




# Polysubstance Abuse

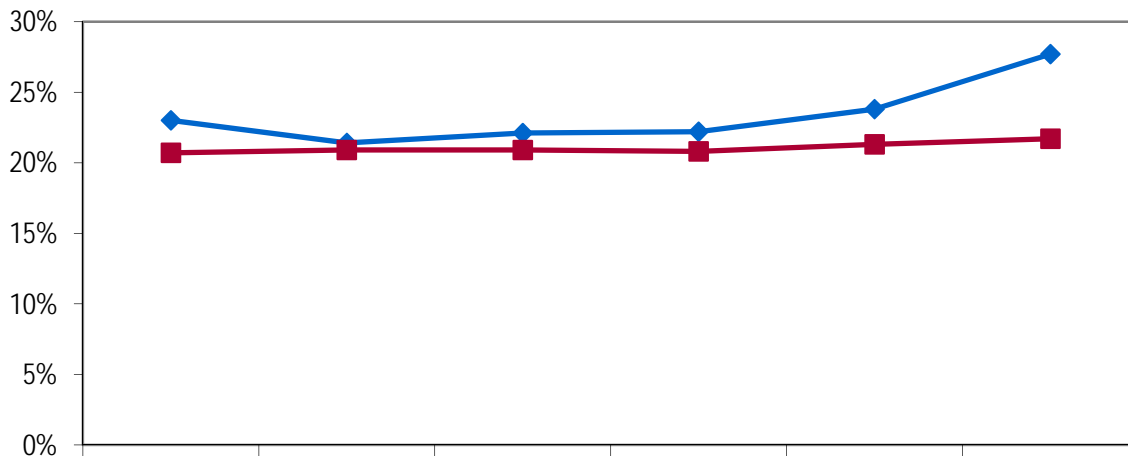
- Serious pattern of substance use that involves the consumption of two or more substances at a time
- Among the Indiana treatment population, 62% use two or more drugs and 28% use three or more drugs (both rates are significantly higher than national rates of 56% and 22%)<sup>5</sup>
- Polysubstance abuse has increased significantly from 2000 to 2005 <sup>5</sup>

# Polysubstance Abuse



**Treatment Admissions  
Using 2+ Substances  
(TEDS)<sup>5</sup>**

**Treatment Admissions  
Using 3+ Substances  
(TEDS)<sup>5</sup>**



Indiana	23.0%	21.4%	22.1%	22.2%	23.8%	27.7%
U.S.	20.7%	20.9%	20.9%	20.8%	21.3%	21.7%



# Summary

- 1) Alcohol and tobacco remain the most widely used substances
- 2) Consumption and consequences of marijuana, meth, cocaine, and heroin appear to be stabilizing or even becoming less of a problem
- 3) The non-medical use of prescription drugs continues to expand
- 4) Much of the substance use involves using 2 or more substances (polysubstance abuse) – most frequently alcohol together with another drug



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# Updates

- 2007 State Epidemiological Profile and slides of this presentation are available online at <http://www.healthpolicy.iupui.edu/SEOW.htm>
- Printing hard copies
- Drug fact sheets
- CD-version



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# **Questions & Comments**



# REFERENCES

- <sup>1</sup> Substance Abuse and Mental Health Administration. (2007). *National Survey on Drug Use and Health (NSDUH) – homepage*. Retrieved May 15, 2007, from <https://nsduhweb.rti.org/>
- <sup>2</sup> Centers for Disease Control and Prevention. (2007). *Prevalence data*. Retrieved May 16, 2007, from <http://apps.nccd.cdc.gov/brfss/>
- <sup>3</sup> Centers for Disease Control and Prevention. (2007). *Healthy Youth! YRBSS*. Retrieved July 18, 2007, from <http://apps.nccd.cdc.gov/yrbss/>
- <sup>4</sup> Indiana Prevention Resource Center. (2007). *Alcohol, tobacco, and other drug use by Indiana children and adolescents*. Retrieved May 15, 2007, from [http://www.drugs.indiana.edu/data-survey\\_monograph.html](http://www.drugs.indiana.edu/data-survey_monograph.html)
- <sup>5</sup> Substance Abuse and Mental Health Data Archive. (n.d.). *Treatment Episode Data Set (TEDS) series*. Retrieved May 15, 2007, from <http://webapp.icpsr.umich.edu/cocoon/SAMHDA-SERIES/00056.xml>
- <sup>6</sup> Centers for Disease Control and Prevention. (2004). *Alcohol-Related Disease Impact (ARDI)*. Retrieved June 30, 2006, from <http://apps.nccd.cdc.gov/ardi/Homepage.aspx>
- <sup>7</sup> Indiana State Department of Health, Epidemiology Resource Center. (2007). *Alcohol-Related Deaths by County of Residence and Age, Indiana 2000-2004*. Data received March 2007.
- <sup>8</sup> Fetal Spectrum Disorders Center for Excellence. (2007). *The physical effects of Fetal Alcohol Spectrum Disorders*. Retrieved July 31, 2007, from [http://www.fascenter.samhsa.gov/documents/WYNK\\_Physical\\_Effects.pdf](http://www.fascenter.samhsa.gov/documents/WYNK_Physical_Effects.pdf)
- <sup>9</sup> Indiana State Police. (June 5, 2007). *Vehicle Crash Records System (VCRS)*. Database maintained by the Indiana State Police and made available to the Center for Urban Policy and the Environment, School of Public and Environmental Affairs, Indiana University–Purdue University Indianapolis.
- <sup>10</sup> National Archive of Criminal Justice Data. (n.d.). *Uniform Crime Reporting program resource guide*. Retrieved May 15, 2007, from <http://www.icpsr.umich.edu/NACJD/ucr.html>
- <sup>11</sup> Indiana Tobacco Prevention and Cessation. (2007). *Indiana Youth Tobacco Survey*. Data tables received September 17, 2007, from Miranda Spitznagle.
- <sup>12</sup> Indiana State Department of Health. (n.d.). *Public health aspects of tobacco use*. Retrieved July 18, 2007, from <http://www.in.gov/isdh/programs/tobacco/tobacco.htm>



# REFERENCES

- <sup>13</sup> Centers for Disease Control and Prevention. (2007). *Smoking and tobacco use*. Retrieved July 18, 2007, from <http://www.cdc.gov/tobacco/>
- <sup>14</sup> Centers for Disease Control and Prevention. (2007). *CDC WONDER – Compressed mortality file*. Retrieved May 21, 2007, from <http://wonder.cdc.gov/mortSQL.html>
- <sup>15</sup> Centers for Disease Control and Prevention. (n.d.). *Smoking-attributable mortality, morbidity, and economic costs (SAMMEC)*. Retrieved July 18, 2007, from <http://apps.nccd.cdc.gov/sammecc/index.asp>
- <sup>16</sup> National Institute on Drug Abuse. (2007). *Marijuana. NIDA info facts*. Retrieved June 26, 2007, from <http://www.nida.nih.gov/Infofacts/marijuana.html>
- <sup>17</sup> National Institute on Drug Abuse. (2005). *NIDA research report—Cocaine abuse and addiction*. NIH Publication No. 99-4342, Printed May 1999, Revised November 2004. Retrieved July 18, 2007, from <http://www.drugabuse.gov/PDF/RRCocain.pdf>
- <sup>18</sup> U.S. Drug Enforcement Administration. (2007). *Indiana State Fact Sheet*. Retrieved June 26, 2007 from <http://www.dea.gov/pubs/states/indianap.html>
- <sup>19</sup> National Institute on Drug Abuse. (2005) *Research report: Heroin abuse and addiction*. Retrieved June 27, 2007, from <http://www.drugabuse.gov/PDF/RRHeroin.pdf>
- <sup>20</sup> Indiana State Department of Health. (n.d.). *HIV/STD quarterly/semi annual reports*. Retrieved August 2, 2007, from <http://www.in.gov/isdh/programs/hivstd/quarterly/quarterly.htm>
- <sup>21</sup> U.S. Drug Enforcement Administration/Indiana State Police. (2007). *Clandestine Methamphetamine Laboratory Seizures*. Data January 29, 2007.
- <sup>22</sup> National Institute on Drug Abuse. (2005). *Research Report Series—Prescription Drugs: Abuse and addiction*. Retrieved August 31, 2007, from <http://www.nida.nih.gov/PDF/RRPrescription.pdf>
- <sup>23</sup> U.S. Drug Enforcement Agency, Office of Enforcement Operations, Pharmaceutical Investigations Section, Targeting and Analysis Unit. (2007). *State of Indiana oxycodone purchases 2002-2007*. Prepared September 7, 2007. Received September 14, 2007 from Dennis Wichern.